Department of Research and Evaluation
AUSTIN INDEPENDENT SCHOOL DISTRICT

AISD REACH Program Update:

Mentoring and Beginning Teacher Effectiveness and Retention

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EXECUTIVE SUMMARY

Participants consistently and enthusiastically have praised the value of the Austin Independent School District (AISD) REACH novice teacher mentor program since its inception. Results from surveys, interviews, and focus groups have supported the idea that participants believe the program to be of high quality and of benefit to both the development and retention of beginning teachers (BTs). Tying the program to more concrete indicators of BT effectiveness and BT retention is challenging for reasons described in this report, but some evidence does suggest that BTs who were supported by AISD REACH mentors have had more positive experiences than their comparison school counterparts have had. Within the AISD REACH program, teachers who received more years of mentoring support also received higher administrator observation scores and peer observations scores, and had higher ratings of self-efficacy than did teachers who received fewer years of mentoring support. Taken together, the results suggest that the AISD REACH mentees and their students benefit from the support they receive from their mentors, and that teachers who have been mentored longer benefit most.

Results for teacher retention are encouraging, but not consistently positive. Although the retention rates for the 2008–2009 and 2009–2010 1st-year teachers with AISD REACH mentors appear to be more positive than the retention ratings for their comparison peers, the effect has diminished somewhat over time. The retention rate for AISD REACH teachers in the 2008–2009 cohort started out strong, particularly after the second year of mentoring, but by year 4, the retention rates of AISD REACH and comparison teachers in that cohort were nearly identical (43% and 44%, respectively). Then in 2013–2014, the retention rate again was much higher for the AISD REACH BTs than for the comparison BTs. The AISD REACH teachers in the 2009–2010 cohort were retained at a much greater rate than were their comparison peers for the first two years, but by year 3 the difference was small. These results suggest that in general, BT retention is influenced while they are being mentored but the effect may not be sustained easily once BTs exit the mentoring program.

Recommendations:

- Given the considerable expense of the program, district staff should consider setting specific criteria for what constitutes a measurable benefit to new teachers, their schools, and their district and continue to monitor the extent to which this program yields such benefits.
- Future investigations also should continue the examination of the extent to which any benefits can be sustained beyond the novice years.

- Although mentoring alone will not prevent all attrition (nor would that be a desirable outcome), future work in this area should include a targeted investigation of teacher leavers to identify any perceived gaps in support that might help to explain the tendency for mentoring benefits on retention to diminish over time.
- Program staff should continue to reflect on the work of mentors and the intended impact for teachers with respect to the mechanisms that promote teacher retention.
- Program staff also should consider the challenges that AISD REACH BTs face as they exit the program and no longer have the support of a full-time mentor. The evidence suggests that retention rates drop after BTs exit the program, and it may be valuable to identify any gaps in support for early career teachers as they transition from BTs to teacher leaders.

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INTRODUCTION

Beginning in 2007, through the implementation of the Austin Independent School District (AISD) REACH strategic compensation program, beginning teachers (BTs) at some of the highest-needs schools have been supported by an intensive mentoring program based on the New Teacher Center's comprehensive induction model.[1] The AISD REACH mentors are full-time district staff who provide high-quality individualized professional development opportunities; guidance; and classroom support to teachers in their first, second, and third years of teaching. The coaching model includes collecting, analyzing, and reflecting on teacher and student data, planning collaboratively, setting professional goals, and modeling professional teacher behavior. Thirty-eight schools and 1,000 teachers have been supported by AISD REACH mentors since the 2007—2008 school year (Table 1).

Table 1. Schools and Beginning Teachers (BTs) Supported by AISD REACH Mentors

Number		2007—2008	2008—2009	2009—2010	2010—2011	2011—2012	2012—2013
BTs supported, by years of experience	1st year	29	36	70	85	106	235
	2nd year	28	43	75	84	93	96
	3rd year	28	36	50	70	101	102
	Total*	85	115	195	239	300	433
Schools		6	8	13	17	26	38
Mentors		13	14	23	27	32	40

Source. District records.

*In some years, at the request of principals, mentors supported a small number of teachers with more than 3 years of experience. These teachers were not included in the subsequent analyses.

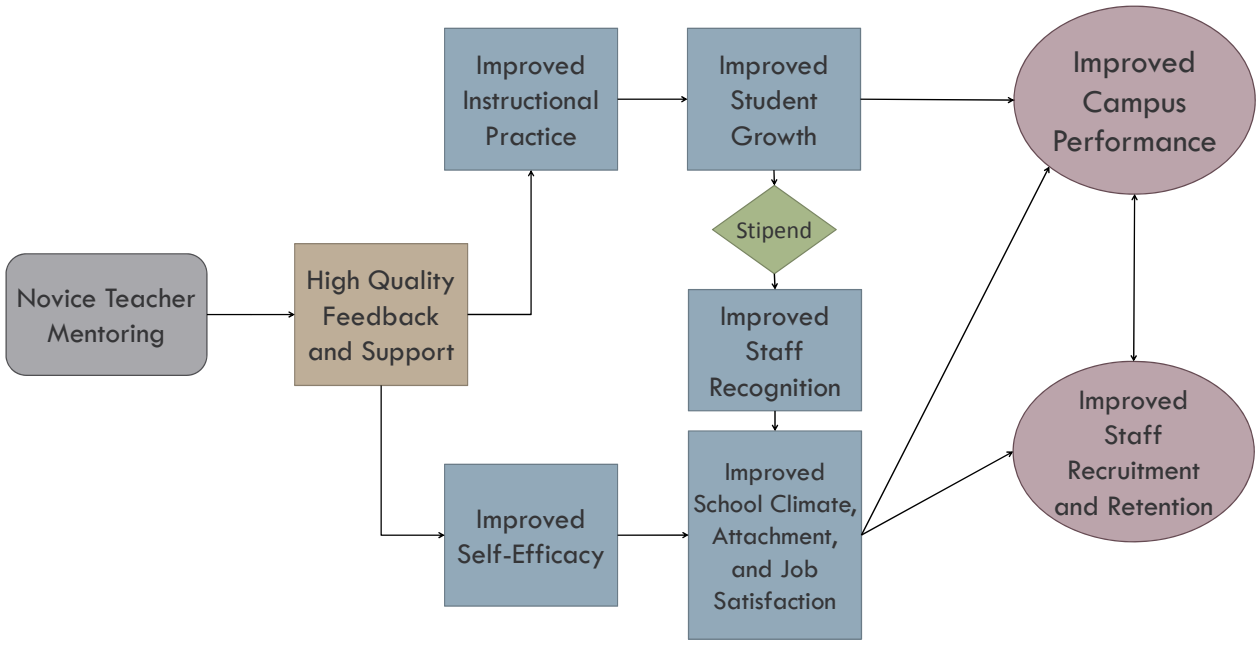
Tying the AISD REACH mentoring program to indicators of BT effectiveness and BT retention is challenging. Novice teachers improve in their first 3 years of teaching whether they are mentored or not. Some examinations of cohorts of teachers may overestimate this improvement due to attrition of the less competent teachers, particularly after their 1st year of teaching (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009). Therefore, in the present report, both longitudinal and comparative data were used when possible.

The mechanisms through which BT mentoring are expected to positively influence retention and

[1]http://www.newteachercenter.org/mentors

effectiveness are depicted in Figure 1. Assessing the impact of mentoring on student outcomes was somewhat challenging given the degree of separation between mentoring practice and student performance. As displayed in the Figure 1, the high-quality feedback and support provided by AISD REACH mentors was expected to lead to improvements in their BT's instructional practice, which was expected to have a positive impact on student growth. In addition, improvements in teachers' self-efficacy, perceptions of their working conditions, psychological attachment to their school and/or the teaching profession, and improvements in job satisfaction were expected to lead to improved BT retention rates at AISD REACH campuses. The following sections address the extent to which the available program data supported these hypothesized relationships. Where possible, results are longitudinal and/or are presented alongside comparative data from teachers at demographically similar AISD schools ("comparison schools").

Figure 1. Hypothesized Relationships Between Mentoring and Beginning Teacher Effectiveness



HIGH-QUALITY FEEDBACK AND SUPPORT

Teachers, principals, and mentors have consistently provided very positive feedback about the AISD REACH mentor program and the quality of support the AISD REACH mentors provide to BTs (e.g., Cornetto & Schmitt, 2010; Cornetto & Schmitt, 2012). For example, Figure 2 displays words commonly used by BTs to describe their mentors during interviews. In 2013, 100% of AISD REACH principals surveyed agreed that "It is valuable for me to have the AISD REACH mentor(s) on my campus." And during focus group conversations, it is not uncommon for more experienced teachers at AISD REACH schools to express their appreciation for the support their novice colleagues receive, as well as their frustration with their own experiences as a novice teacher without an AISD REACH mentor supporting them.

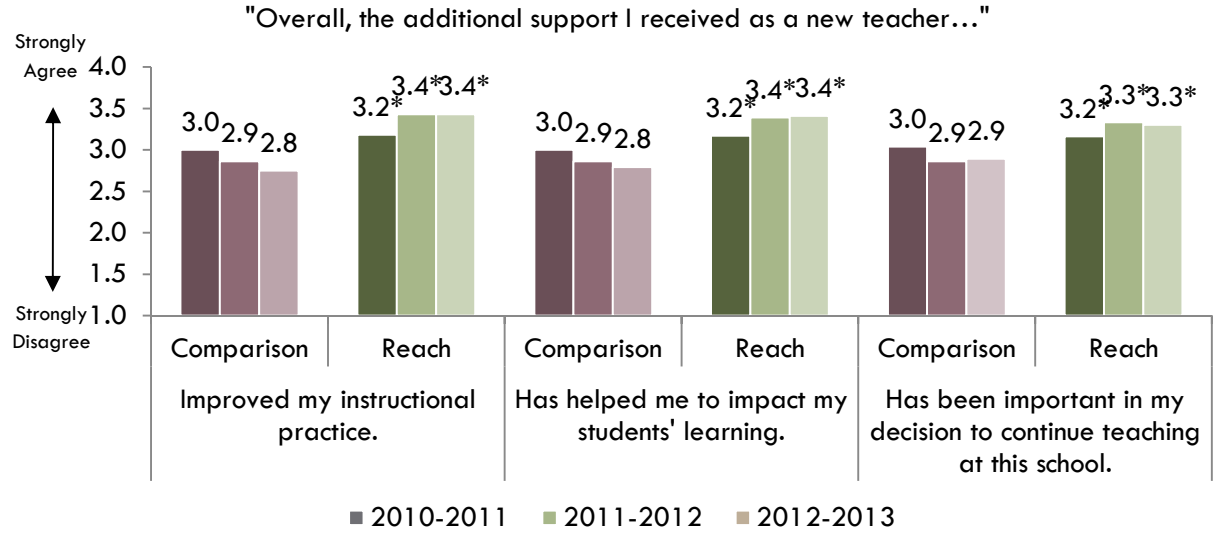
Figure 2. Word Cloud: Frequency of Words Used During AISD REACH Beginning Teacher Interviews When Describing Their Mentors

Source: 2012 BT interviews

Three items that are part of the annual Teaching, Empowering, Leading, and Learning (TELL) AISD Working Conditions survey address the extent to which the support BTs received as a new teacher improved instructional practice, had an impact on student learning, and influenced their decision to stay at their school. Data for the 2010—2011 through 2012—2013 school years are displayed in Figure 3 for both AISD REACH BTs as well as for BTs at comparison schools.

These survey results indicated that BTs who were supported by AISD REACH mentors rated their new teacher support more positively than did BTs who were at comparison schools and did not receive the same kind of support. In addition, the ratings given by AISD REACH BTs stayed the same or increased slightly over time, while the ratings given by comparison BTs declined slightly over time.

Figure 3. Results from Teaching, Empowering, Leading and Learning (TELL) AISD Working Conditions Survey Beginning Teacher Support Items



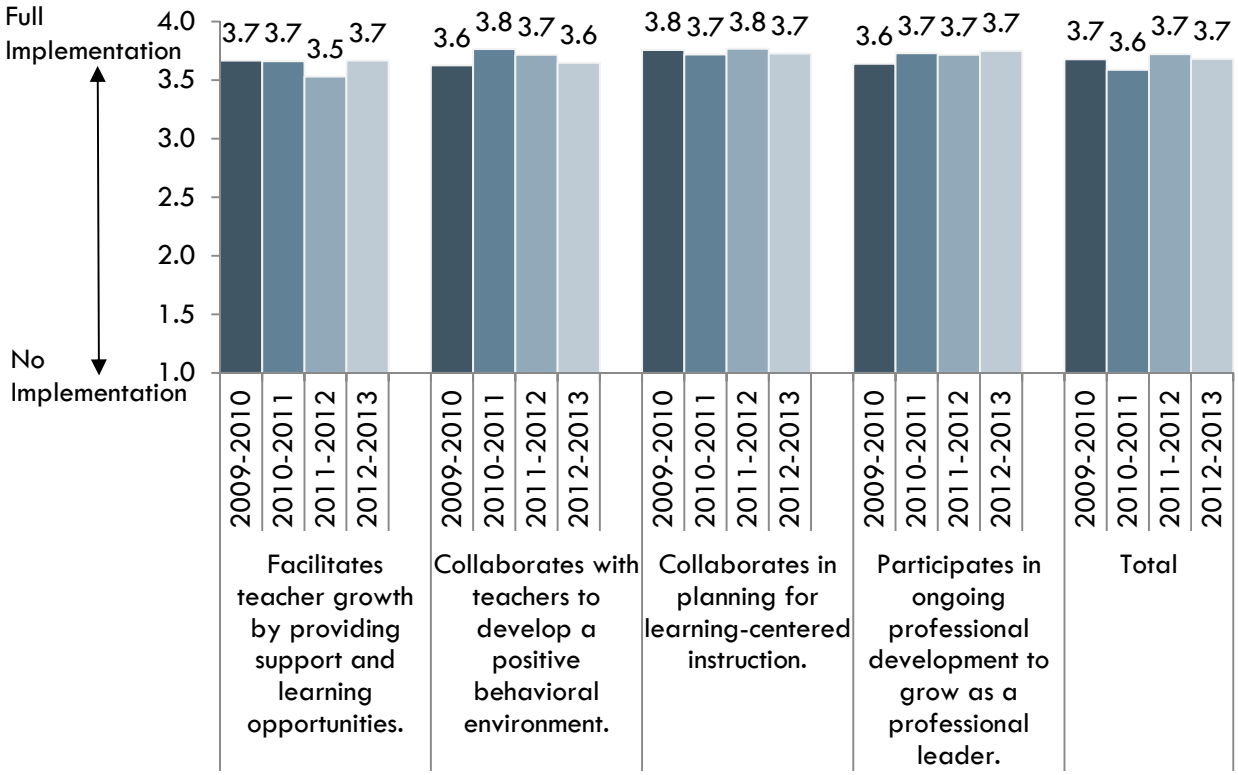
Source. TELL AISD Working Conditions Survey.

Note. Tests of significance are between REACH and Comparison teachers within year and question. *$p < .05$

In addition to the TELL AISD survey results, annually all REACH BTs annually rate their mentor on a rubric. The AISD REACH mentor evaluation rubric is an assessment tool organized into four major domains of mentoring: (a) facilitates teacher growth by providing support and learning opportunities, (b) collaborates with teachers to develop a positive behavioral environment, (c) collaborates in planning for learning-centered instruction, and (d) participates in ongoing professional development activities to grow as a professional leader. Each theme has components that reflect research-based descriptions of best mentoring practices, and each component includes a description of different levels or degrees of implementation in the workplace. BTs select the place on the rubric that best describes their mentor for each of the components. Scores are then computed on a scale from 1 to 4, where 4 = full implementation, 3 = accomplished implementation, 2 = beginning implementation, and 1 = no implementation. Figure 4 displays the results of the AISD REACH mentor evaluation ratings from 2009—2010 through 2012—2013. The results indicate that not only were the AISD REACH mentors rated very highly on these domains, but also their results remained consistently high over time.

The data presented in Figures 2 and 3 suggest that AISD REACH BTs perceived their mentor's support to be very valuable and that their mentors were enacting well the mentoring components outlined in the evaluation rubric. To enhance our understanding of the ways in which what

Figure 4. AISD REACH Mentor Evaluation Results, by Domain, 2010—2013



Source. AISD REACH Mentor Evaluation records.

Note. Means were computed based on ratings given by beginning teachers.

mentors do influences BTs, in the following section we look more closely at mentoring practice.

Mentoring Practice

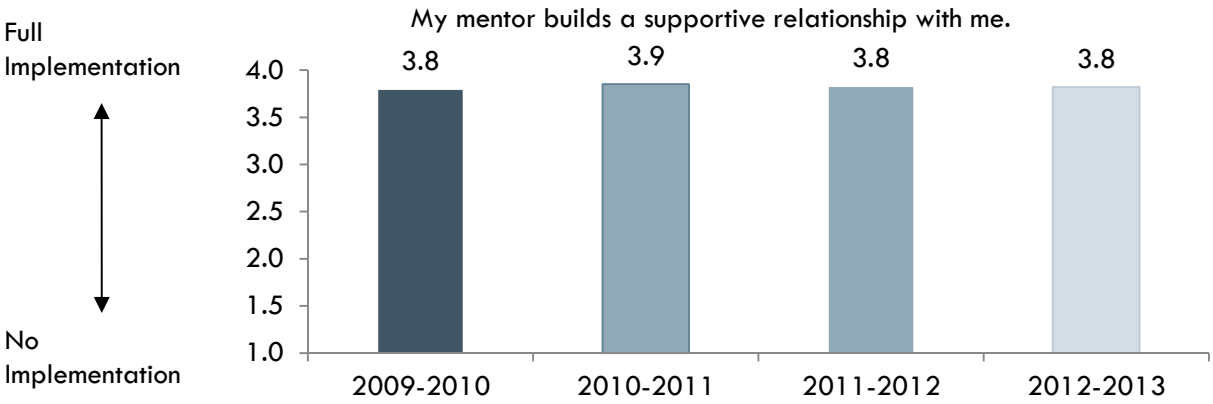
In 2012—2013, 12 of the 32 AISD REACH mentors (38%) participated in an hour-long interview about their mentoring practice, and most of their responses focused on their goals for establishing and maintaining relationships with BTs, including challenges and strategies for working with reluctant teachers and ensuring BT engagement, alignment of coaching strategies with needs of BTs, coaching momentum and keeping teachers motivated for continuous improvement, use of classroom observation and feedback, ways in which mentoring builds teacher confidence and autonomy, and helping teachers understand and connect with the school environment beyond their classroom.

The AISD REACH mentors consistently and intensely highlighted how critical the BT-mentor relationship was for BT success. Mentors emphasized building trust as a critical precursor to

instructional support. One mentor said, "I need to have good working relationship with mentees in order for them to let me into the classroom. I have to listen to them and be instructive in my approach and establish trust, that I am there to support them for their best interest."

In addition to the emphasis on relationship building that came out during the interviews, Figure 5 displays the AISD REACH mentor evaluation form results for the item "My mentor builds a supportive relationship with me." The AISD REACH mentors were consistently rated very highly on this component.

Figure 5. Results for AISD REACH Mentor Evaluation Relationship Building Item, 2010 to 2013



Source. AISD REACH mentor evaluation records.

Note. Means were computed based on ratings given by beginning teachers.

Clearly, building and maintaining trusting professional relationships is an important focus of the mentoring program, and this and other mentoring goals are accomplished in a variety of ways. All AISD REACH mentors were required to log their work hours and to code each discrete event into categories based on the primary focus/goal of the event. Mentors indicated with whom they worked, for how long, and in what category, and provided any notes that they had about what happened during the meeting to add contextual information to the entry. This practice resulted in a comprehensive database upon which to draw information about mentor coaching activities.

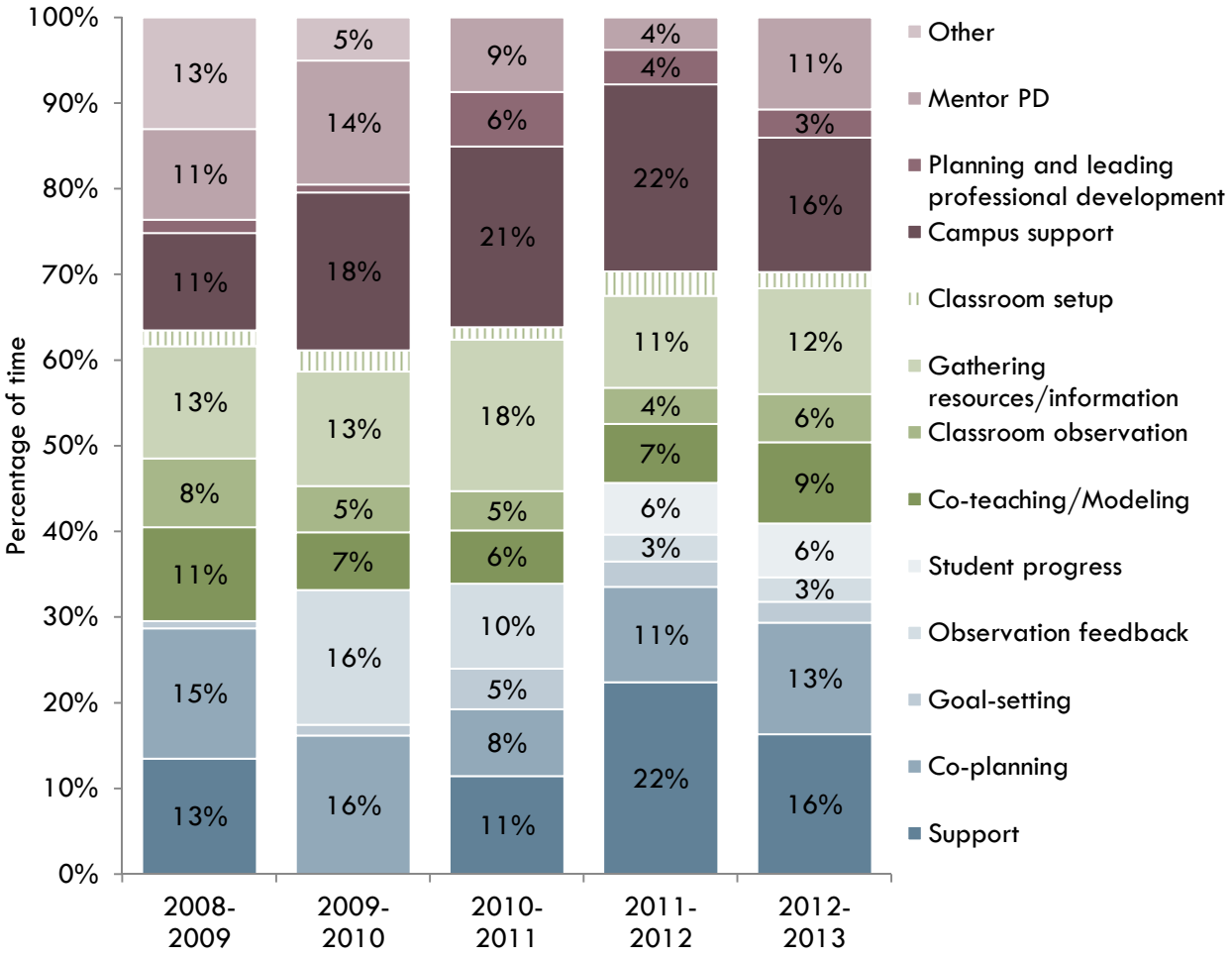
> *Really it is all about the relationship--they're not going to let you in their classroom, or their life, if they don't feel like they have that with you.*
>
> *AISD REACH Mentor*

Figure 6 displays a summary of mentoring activities for 2008—2009 through 2012—2013. The categories coding scheme that the AISD REACH

mentors used changed somewhat over the first 3 years, but to the extent possible, activities for these years were recoded to fit within the coding scheme used since the 2010—2011 school year to allow for comparison across years.

The breakdown of activities was surprisingly stable across time. While no single category stood out among the others as a primary focus, it is notable that in each year the amount of time mentors spent supporting the campus remained one of the largest categories. Although much of the campus support activity in which AISD REACH mentors were engaged was done alongside their BTs (e.g., participation in morning duty with their BTs or attending Back to School events with their BTs), some proportion of their time was spent supporting the campus at large in ways that might only indirectly have benefitted their BTs. In addition, a large portion of time (11% to

Figure 6. AISD REACH Mentor Activity Time Log Summary, 2008—2009 Through 2012—2013



Source. AISD REACH mentor time logs

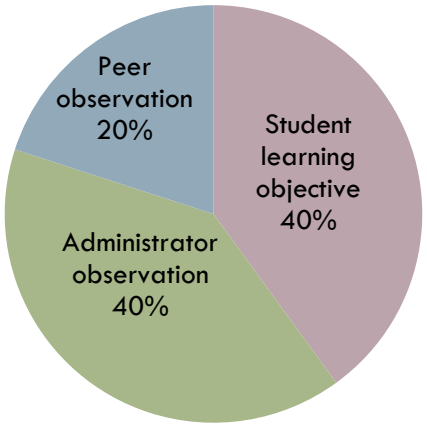
22%) was dedicated to support that included conferences and activities specifically focused on providing emotional support and relationship- building with BTs. This was consistent with the interviews in which mentors emphasized how crucial it was to devote time to building and maintaining a trusting relationship. Two more categories that were consistently larger than others were co-planning (11% to 22%) and gathering resources (11% to 18%).

Improved Instructional Practice and Student Growth

One of the most challenging aspects of evaluating the AISD REACH mentor program is assessing the impact of mentoring on BT instructional practice, and ultimately on student growth. The degree of separation between mentors and students, along with challenges related to the measurement of teacher practice, limit the ability to determine the ways in which mentors affect teaching and learning processes. Partially in response to this challenge, teacher self-efficacy was introduced into the logic model to establish a link between mentoring and effective instruction. And the results for 2012—2013 indicated that years of mentoring was minimally but positively associated with teacher self-efficacy for both middle ($r = .10$; $p < .05$) and high school ($r = .18$; $p < .05$) teachers.

For the present report, a multiple measure-based teacher effectiveness index was computed using the percentage of points earned on the state observation-based evaluation instrument (completed by the principal), the percentage of master teacher (peer) observation points earned (based on two 45-mintute observations) and the percentage of the teacher's students who met his or her (teacher-set) student learning objectives (SLOs). The weighting of each measure (Figure 7) was determined based on the recommendations of a teacher appraisal development working group charged with developing a new teacher appraisal program for the district. To validate the index as a measure of effective teacher practice, index scores were correlated with several other measures that were expected to be associated with the index (based on previous research examining the components used to compute it), including years mentored, value-added index scores, and teacher self-efficacy (Table 2). Weak to moderate correlations were observed for each of these measures.

Figure 7. Weighting of Components of 2013 Teacher Effectiveness Index



Next, teachers were percentile ranked based on their 2012—

Table 2. Correlations Between 2012—2013 Teacher Effectiveness Index Score and Years Mentored, Value-Added Index Scores, and Teacher Self-Efficacy

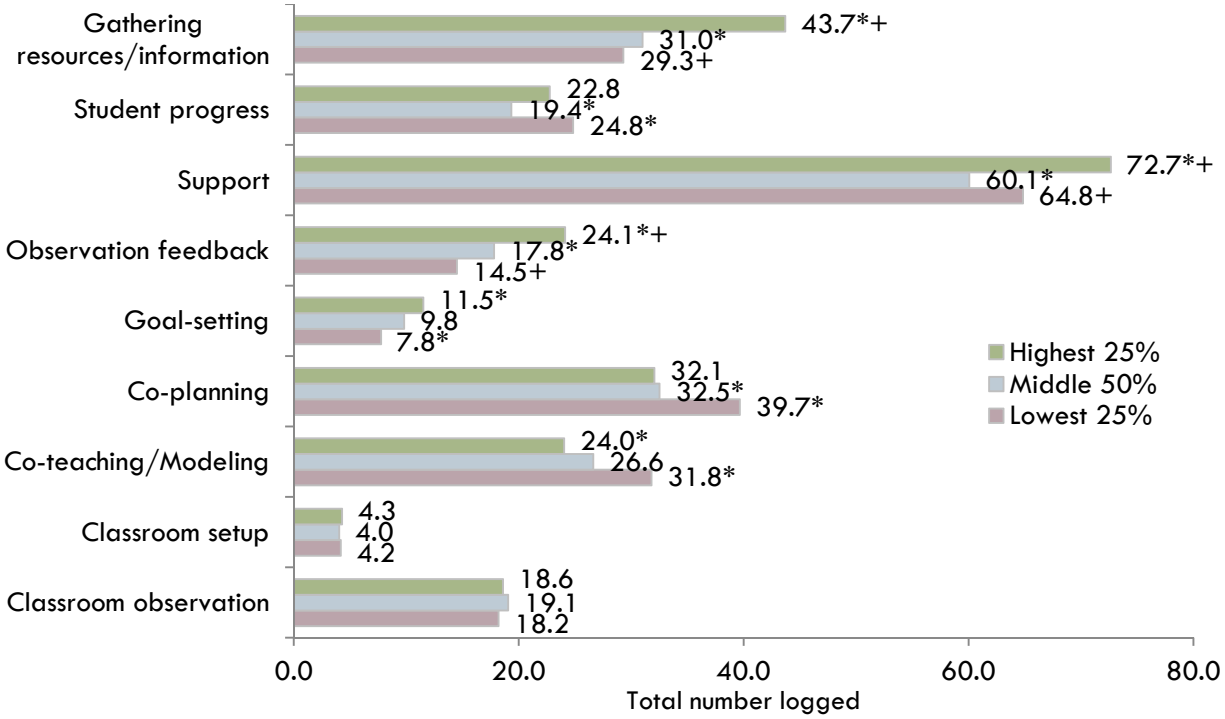
	Elementary	Middle	High
Years mentored as of 2012—2013	.15*	.21*	.24**
2013 EVAAS reading/English language arts index	—	.58	.16
2013 EVAAS math index	.43**	.22	.42**
Teacher self-efficacy	.16*	.24*	.15*

Source. District mentoring records, district EVAAS records, and 2013 Employee Coordinated Survey
Note. Only correlations that are statistically significant, or are of a similar magnitude to the significant correlations but are limited by their n counts, are included here. EVAAS is Educational Value-Added Assessment System.
*$p < .05$
**$p < .01$

2013 index scores. The distribution of scores varied according to school level; therefore, level-specific cut scores were applied to each index score. Data from the AISD REACH mentor time log then were used to examine the extent to which mentoring practice was associated with higher ranking on the teacher effectiveness index. Data were available for multiple years for the same teachers, and the degree to which a mentor used a specific strategy varied considerably based on where the teacher was in terms of his or her readiness; therefore, cumulative frequencies (i.e., the total number of times that particular strategy was logged for that teacher) were computed for each category of support for each teacher across the 3 most recent years of available data, 2010—2011 through 2012—2013.

Next, the cumulative totals for each type of support were compared for teachers in the top 25%, middle 50%, and lowest 25% of the effectiveness index. Figure 8 displays the mean frequencies for each category for each percentile ranked group. BTs in the highest 25% received more support over time than did other teachers in three categories: gathering resources, emotional support, and post-observation feedback. In addition, mentors spent more time co-planning and co-teaching with teachers who were in the bottom 25% than with teachers in the highest 25%. Interpreting these data was somewhat challenging given that we cannot establish causation based on tests of mean differences alone. However, given that the support provided spanned up to 3 years prior to the observations and SLO results used to compute the effectiveness rankings, we can tentatively infer that some connection may exist between enacting certain coaching strategies and the extent to which teachers engaged in effective instructional practice.

Figure 8. 2011 Through 2013 Mentor Time Log Cumulative Frequencies by Conference Type



Source. AISD REACH mentor time logs

Note. Superscripts indicate which groups are significantly different at the $p < .05$ level.

The data suggest a degree of strategic choice on the part of the AISD REACH mentors in terms of assessing the readiness of their BTs. Mentors provided a greater amount of co-teaching and co-planning support to struggling teachers when compared to others. Qualitative data collected from mentors and from program leaders suggested that these activities in particular are the most critical competencies for a new teacher, and that mentors generally had to spend more time on these activities with teachers who struggled most. Practically speaking, mentors were focused on the needs of BTs and their students, and when a teacher was truly struggling, mentors were likely to do what they could to ensure that the students got what they needed, including more co-teaching than what they might otherwise do with their better teachers. Greater use of co-planning and analyzing student with work struggling teachers reflects the AISD REACH mentors' strategic decisions to stay focused on student progress and to ensure that the students stayed on track so that there were no gaps in their classroom experience.

AISD REACH mentors spent more time gathering resources, in support conferences, goal-setting, and on post-observation feedback for the teachers in the highest 25% than with other teachers.

AISD REACH mentors were trained to extend greater autonomy to BTs as their skills developed, and mentoring support in the form of gathering resources and support conferences likely reflects this development. In addition, AISD REACH mentors engaged in more co-teaching with struggling teachers than with more developed teachers and therefore were less likely to have formal observation/feedback events with developing teachers than they did with the higher performing teachers. Finally, the higher number of support conferences that the highest 25% received likely reflects the leadership support that more autonomous BTs received from their mentors. Once BTs had mastered basic skills, AISD REACH mentors focused on developing them into teacher leaders on their campuses, including such skills as working cooperatively with their peers.

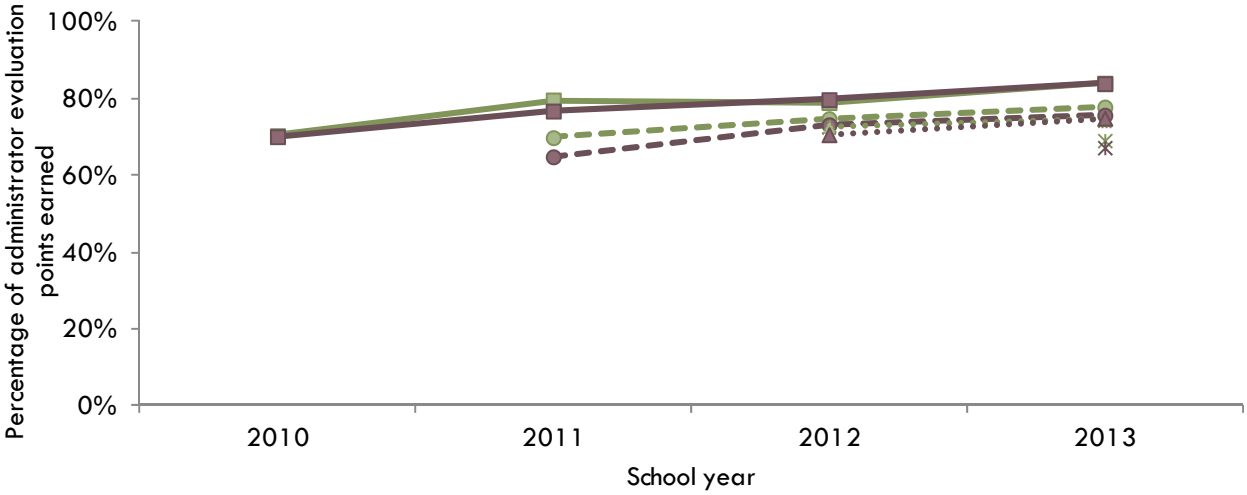
AISD Reach and Comparison BT Improvement

It is not possible to compute the same effectiveness index for the comparison BTs; they do not have SLO or peer observation programs in place at their schools. The only metric common to both groups is the administrator observation-based appraisal. Figure 9 displays the percentage of appraisal points that BTs earned from 2010 through 2013. Each line represents a BT first-year teacher cohort, either AISD REACH or comparison, and the average percentage of points earned by each group for each year. While all cohorts demonstrated improvement as they gained experience, there are several points at which the AISD REACH BTs were rated higher than their comparison peers. For each cohort, AISD REACH BTs earned higher appraisal scores than did their comparison peers earlier in their career. For example, the 2011 scores for the 2009—2010 cohort are higher for AISD REACH BTs than for comparison BTs, and AISD REACH BTs showed greater improvement from the previous year than did comparison BTs, gaining 10 percentage points versus 7. For the 2010—2011 cohort, the AISD REACH BTs had higher scores than the comparison BTs as first-year teachers (70% vs 65%), and remained slightly higher through 2013. For both the 2011—2012 and 2012—2013 cohorts, AISD REACH BTs scored 2 percentage points higher than the comparison BTs in their first year.

IMPROVED BT RETENTION

In addition to improving teacher practice, the support of a mentor also was expected to have a positive influence on BT retention. Figure 10a-c displays the BT retention rates over time for the first three cohorts of AISD REACH BTs. Although retention results for the 2007—2008 cohort did not suggest consistently more positive results for AISD REACH BTs than for comparison BTs, the 2008—2009 and 2009—2010 cohort results are encouraging. Notably, however, the positive

Figure 9. Percentage of Administrator Evaluation Points Earned by AISD REACH and Comparison School Teachers, by First-Year Cohort Year

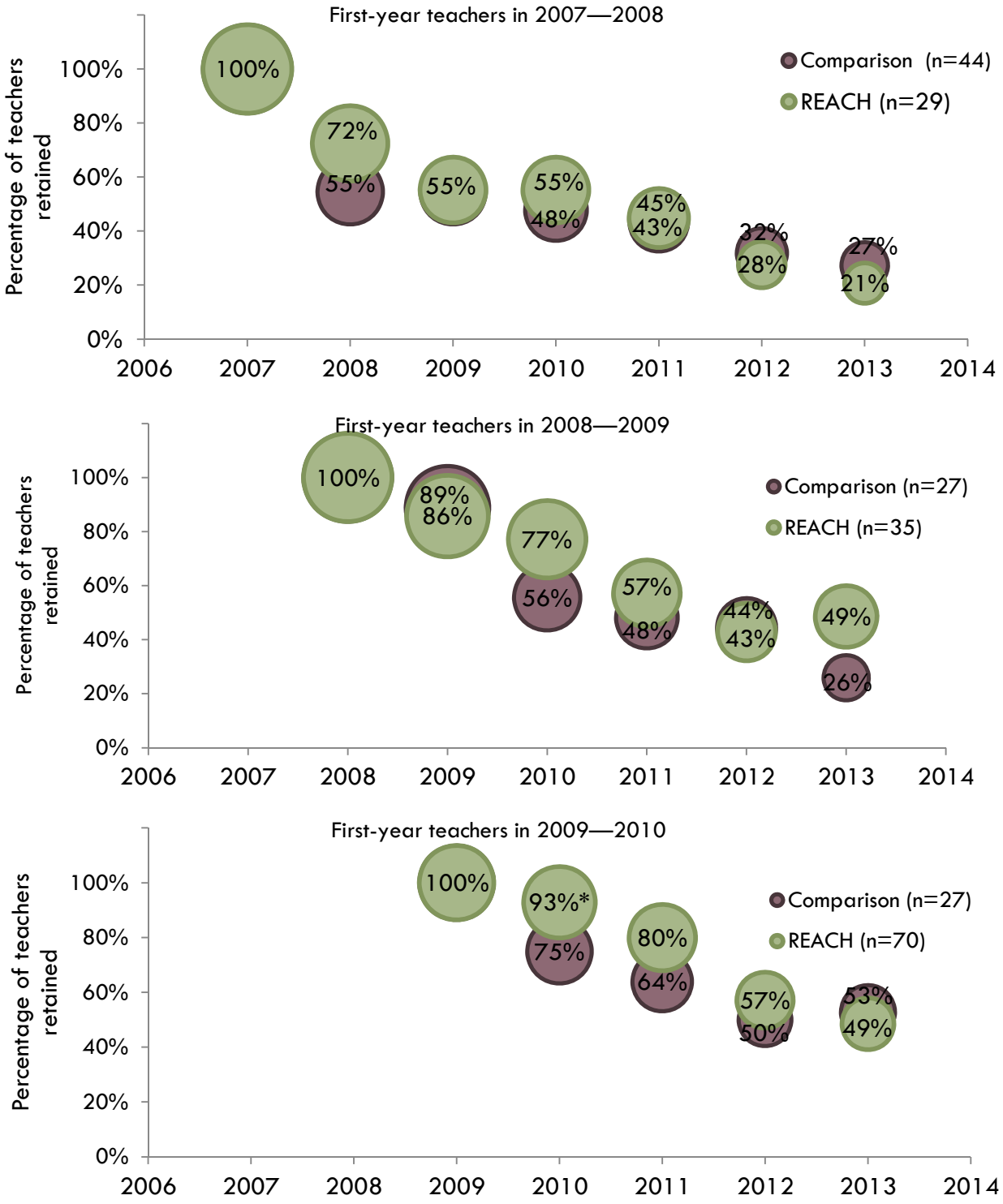


	2010	2011	2012	2013
REACH first-year teachers in 2009—2010	70%	80%	79%	84%
Comparison first-year teachers in 2009—2010	70%	77%	80%	84%
REACH first-year teachers in 2010—2011		70%	75%	78%
Comparison first-year teachers in 2010—2011		65%	73%	76%
REACH first-year teachers in 2011—2012			73%	74%
Comparison first-year teachers in 2011—2012			71%	75%
REACH first-year teachers in 2012—2013				69%
Comparison first-year teachers in 2012—2013				67%

Source. District Human Resources Records (i.e., PDAS or Pilot Appraisal Administrator Ratings)

impact of mentoring on teacher retention appeared to have a diminished effect over time: the greatest difference between AISD REACH teacher retention and comparison teacher retention occurred during the 1st and/or 2nd year. This suggests that although AISD REACH BTs were retained at a greater rate while they were being supported by a mentor, once they exited the mentoring program and it was up to the campus to support the teacher, the impact of the mentoring support on their decision to stay diminished. In some ways, the diminished impact reflects the desirable elimination of teachers who did not develop to the point of being strong enough to remain in the classroom. The data presented in Figure 11 support this conclusion somewhat; BTs who did not return in 2013–2014 had lower scores on their administrator observations and peer observations (although not on SLOs) than those who returned. However, although the magnitudes of the differences were large enough to be considered statistically significant, practically speaking, the teachers who stayed at their schools were rated only slightly

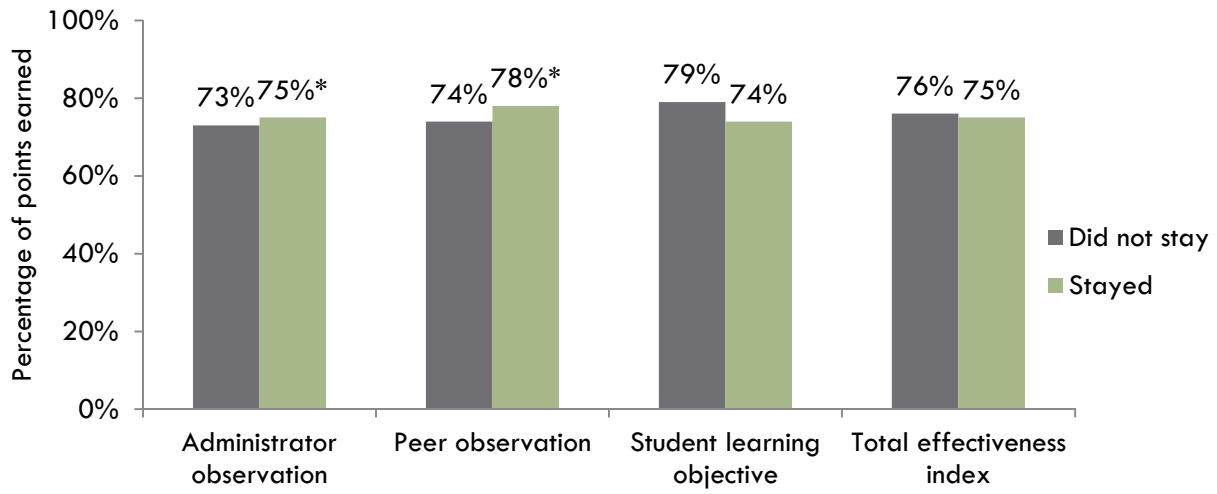
Figure 10 a-c. Longitudinal Retention Rates of First Year Teachers in 2007—2008, 2008—2009, and 2009—2010 at AISD REACH and Comparison Schools



Source. District PEIMS records and Human Resources records. *$p < .05$

Note. 2013—2014 retention is preliminary based on October 2013 snapshot.

Figure 11. Percentage of Points Earned for Administrator Observation, Peer Observation, Student Learning Objectives (SLOs), and Total Effectiveness Index for 2013—2014 Stayers and Leavers



Source. District Human Resources records; AISD REACH program records

Note. 2013—2014 retention is preliminary based on the October 2013 snapshot.
*$p < .05$

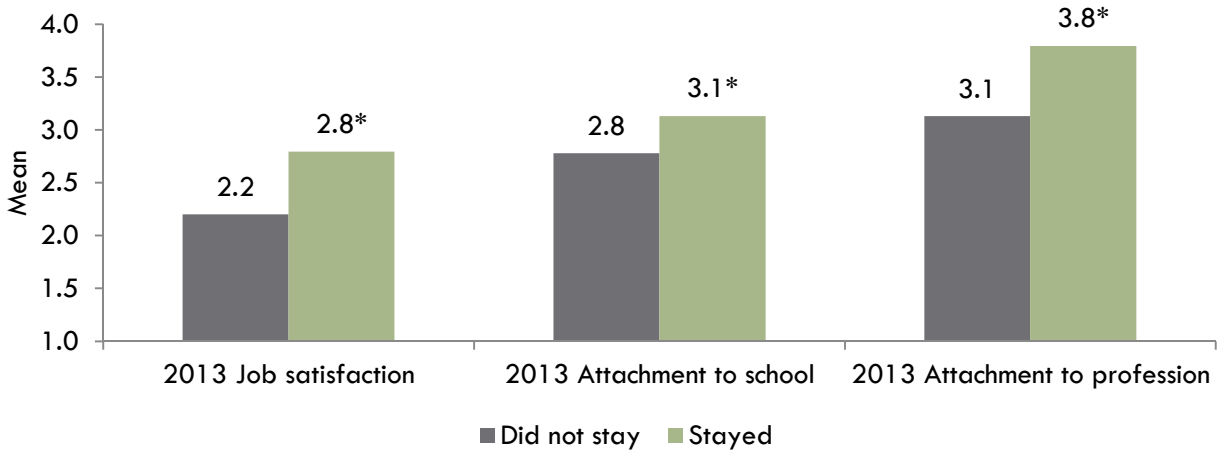
higher by their administrators and peer observers than were those who left.

Interestingly, the 2008–2009 cohort appeared to display the same diminished impact trend until 2013 when the retention rate for AISD REACH BTs was almost twice the rate of the comparison BTs. District human resources staff speculated that changes in school leadership in 2013–2014 may have contributed to a decrease in retention rates for the comparison teachers in that cohort; however, several AISD REACH schools also had changes in leadership that year.

The primary mechanisms by which mentoring was expected to improve retention were by improving job satisfaction and by increasing psychological attachment to the school and to the teaching profession. As demonstrated in Figure 12, consistent with other research in AISD, the AISD REACH BTs who returned to their schools in Fall 2013 had higher job satisfaction and attachment to their schools and profession than did those who did not stay. However, the most recent data show only partial evidence that the number of years a teacher was supported by an AISD REACH mentor was positively associated with increased job satisfaction or attachment (Table 3).

Differences were observed between stayers and leavers in terms of their mentoring experiences.

Figure 12. Mean Job Satisfaction and Attachment to School and Profession, by 2013—2014 Retention Status



Source. 2013 Employee Coordinated Survey; 2013 TELL AISD Working Conditions Survey
Note. 2013—2014 retention is preliminary based on October 2013 snapshot.
*p < .05

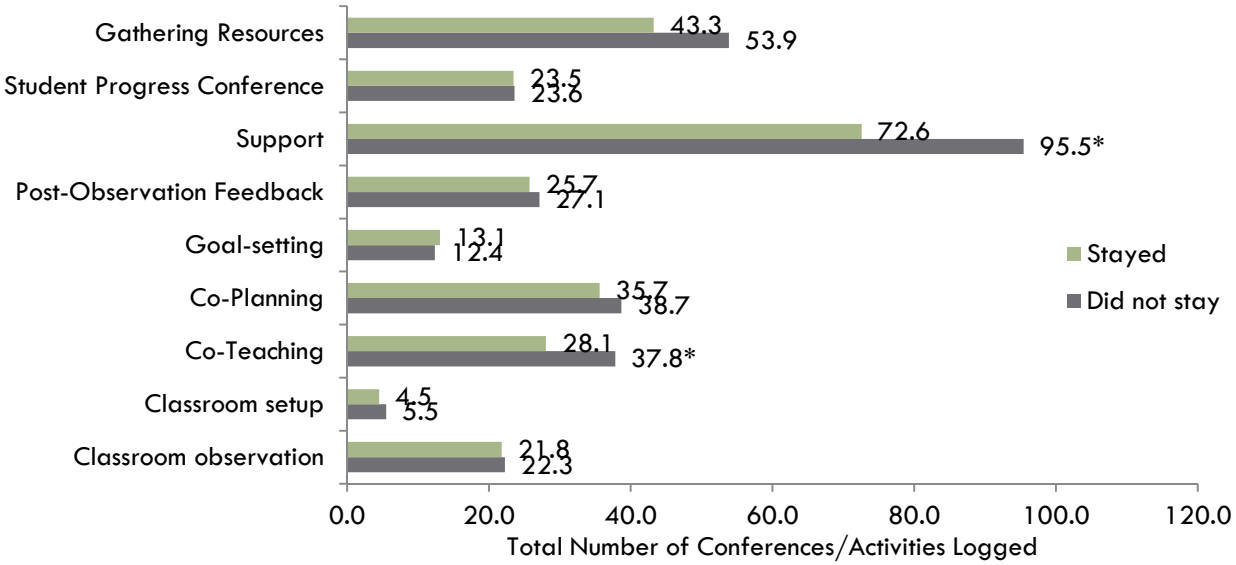
Table 3. Correlations Between Years of Mentoring, Job Satisfaction, and Attachment to School and Profession

	Years Mentored as of 2012—2013		
	Elementary	Middle	High
Job Satisfaction	.17	.31	.11
Attachment to School	-.04	.19*	-.13
Attachment to Profession	-.04	.14	.00

Source. 2013 Employee Coordinated Survey; 2013 TELL AISD Working Conditions Survey; district mentoring records
Notes. Table contains partial correlations with years of teaching experience held constant. N counts were low for Job Satisfaction survey, therefore correlations were not statistically significant in spite of their magnitude.
*$p < .05$

Figure 13 displays mean differences in the cumulative number of conferences for each type of stayer and leaver. Teachers who left their school before the start of the 2013—2014 school year had received more support over time than had teachers who stayed in two areas: emotional support and co-teaching. These findings suggest that mentors spent an extensive amount of time supporting struggling teachers who ultimately left the district. It is important, though, to note that the two types of support these teachers received more of, emotional support and co-teaching, are both types of support most needed in the case of struggling teachers. The increased use of co-teaching in particular is extremely valuable because it likely insulates

Figure 13. Cumulative Number of Conferences Logged from 2010—2011 to 2012—2013, by Type and 2013—2014 Retention Status



Source. AISD Reach mentor time log; district human resources records

*$p < .05$

Note. 2013—2014 retention is preliminary based on the October 2013 snapshot.

students from ill effects that they might otherwise experience by virtue of being assigned to a BT in distress. Similarly, teachers in crisis require more emotional support than do those who are not. These results are consistent with previous findings that revealed differential mentoring support for teachers who stayed and those who left (Cornetto & Schmitt, 2012).

Conclusions and Recommendations

AISD Reach program staff estimate the current cost of the AISD Reach mentoring program to be approximately $2.7 million dollars per year to provide full-time mentors for teachers at 38 schools during their first 3 years of service. Participants consistently and enthusiastically have praised the value of the AISD Reach novice teacher mentor program since its inception. Results from surveys, interviews, and focus groups have supported the notion that participants believe the program to be of high quality and of benefit to both the development and retention of BTs.

Tying the program to more concrete indicators of BT effectiveness and BT retention was challenging for reasons described in this report, but some evidence did suggest that BTs who were supported by AISD Reach mentors had more positive experiences than their comparison school counterparts had, particularly with respect to the additional support that they received as

a new teacher. And within the AISD REACH program, teachers who received more years of mentoring support also received higher effectiveness index scores based on administrator and peer observations and SLO results and higher ratings of self-efficacy, a leading indicator of effectiveness. Taken together, the results suggest that the AISD REACH BTs and their students benefitted from the support they received from their mentors, and that teachers who had been mentored longer benefitted the most. Given the considerable expense of the program, district staff should consider setting specific criteria for what constitutes a measurable benefit to new teachers, their schools, and their district and continue to monitor the extent to which this program yields such benefits.

Future investigations also should continue to examination of the extent to which any benefits can be sustained beyond the novice years. In other words, do teachers who have early mentoring support develop into better teachers than those who do not? And, what are the long term impacts, if any, on teacher retention? Similarly, future studies should continue to investigate the extent to which mentoring in the 3rd year of teaching adds substantial value to experiences of and outcomes for novice teachers.

Results for teacher retention were encouraging, but not consistently positive. Although the retention rates for 1st-year teachers with AISD REACH mentors appeared to be more positive than for their comparison peers, the effect diminished somewhat over time. The retention rate for AISD REACH teachers in the 2008–2009 cohort started out strong, particularly after the 2nd year of mentoring, but by year 4, the retention rates of AISD REACH and comparison teachers in that cohort were nearly identical (43% and 44%, respectively). But in 2013, the AISD REACH retention rate for that cohort was again higher than the rate for comparison BTs. The AISD REACH teachers in the 2009–2010 cohort were retained at a much greater rate than their comparison peers for the first 2 years, but by year 3 the difference was greatly diminished. It is critical to understand the reasons why the impact of mentoring on BT retention may be limited, and to address factors that outweigh the support a mentor can offer. Program staff also should consider the challenges that AISD REACH BTs face as they exit the program and no longer have the support of a full-time mentor. The evidence suggests that retention rates drop after BTs exit the program, and it may be valuable to identify any gaps in support for early career teachers as they transition from BTs to teacher leaders.

It will be important to continue to monitor all of these cohorts to assess the long term effects of mentoring support on BT retention, particularly in light of the myriad of policy and personnel

changes that can threaten the stability of a campus faculty. Although mentoring alone will not prevent all attrition (nor would that be a desirable outcome), future work in this area might include a targeted investigation of teacher leavers to identify any perceived gaps in support.

Similarly, although mentoring was expected to have a positive impact on teacher self-efficacy, psychological attachment to school and to the teaching profession, and job satisfaction, only the number of years mentored consistently had an impact on teacher self-efficacy. That mentor support was not associated with greater job satisfaction or attachment is puzzling. The very nature of the work in which mentors engage is designed both to reduce stress and to increase success and positive experiences—logical precursors to job satisfaction. In the future, it is important to continue to investigate these relationships as well as to explore other mechanisms that might explain the relationship between mentoring and retention. Program staff should continue to reflect on the work of mentors and the intended impact for teachers with respect to the mechanisms that promote teacher retention, and revise the hypothetical model if necessary.

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